

JPRS-TND-93-025

2 August 1993



JPRS Report—

Proliferation Issues

PROLIFERATION ISSUES

JPRS-TND-93-025

CONTENTS

2 August 1993

[This report contains foreign media information on issues related to worldwide proliferation and transfer activities in nuclear, chemical, and biological weapons, including delivery systems and the transfer of weapons-relevant technologies.]

CHINA

- U.S. Charges of Missile Shipment Fabricated [AFP, 24 Jul 93] 1
Chemical Weapons Analysts Meet in Beijing [XINHUA Domestic Service, 21 Jul 93] 1

EAST ASIA

JAPAN

- Support for Indefinite Extension of NPT Unveiled [KYODO, 28 Jul 93] 2

NORTH KOREA

- Japan Warned Against Nuclear Development [KCNA, 30 Jul 93] 2
Pyongyang Reportedly Exporting Midget Submarines to Iran
[Seoul CHOSON ILBO, 27 Jul 93] 3

THAILAND

- Minister To Prepare for Nuclear Plant Construction [DAO SIAM, 5 Jul 93] 3

LATIN AMERICA

REGIONAL AFFAIRS

- Argentine, Brazilian Nuclear Inspection Program Criticized [O GLOBO, 14 Jul 93] 4

BRAZIL

- Former Navy Minister Confirms Nuclear Bomb Production [O GLOBO, 29 Jul 93] 4

NEAR EAST/SOUTH ASIA

INDIA

- U.S. Blamed For Misusing Missile Technology Control Regime [PATRIOT, 19 Jul 93] 5
Further Reportage on Russian Cryogenic Engine Deal 5
Paper Laments Cancellation of Deal [INDIAN EXPRESS, 19 Jul 93] 5
Indigenous Production of Engines Possible by 1997 [INDIAN EXPRESS, 22 Jul 93] 6
Space Research Organization Official Cited
[Moscow ROSSIYSKAYA GAZETA, 29 Jul 93] 6

IRAN

- Commentary on Sale of Chinese M-11 Missiles To Pakistan
[VOICE OF THE ISLAMIC REPUBLIC OF IRAN, 26 Jul 93] 7
Tehran Hopes To Conclude Nuclear Deal With Russia 'Early'
[London AL-SHARQ AL-AWSAT, 26 Jul 93] 7

IRAQ

| | |
|---|---|
| Missile Plant Reported in Tall 'Afar' [AL-SHARQ, 4 Jun 93] | 8 |
| Text of 'Official Letter' to UN Security Council [REPUBLIC OF IRAQ RADIO NETWORK, 22 Jul 93] | 8 |

JORDAN

| | |
|--|----|
| 'Western Sources' Report Mirage, Other Aircraft For Sale [AL-MASIRAH, 26 Jul 93] | 10 |
|--|----|

PAKISTAN

| | |
|---|----|
| Urdu Daily Assails U.S. Stand on Missile Program [NAWA-I-WAQT, 25 Jul 93] | 10 |
| Paper Reviews U.S. Ties, Urges Adherence to Nuclear Policy [NARA-I-WAQT, 26 Jul 93] | 10 |
| Prime Minister on PRC Missiles [RADIO PAKISTAN OVERSEAS SERVICE, 30 Jul 93] | 11 |
| Nuclear Capability Charged, Denied | 11 |
| Former Army Chief Claims Nuclear Capability [Paris LE MONDE, 25-26 Jul 93] | 11 |
| Nuclear Expert 'Does Not Know' of Beg's Nuclear Test Claim [THE NEWS, 26 Jul 93] | 12 |

CENTRAL EURASIA

RUSSIA

| | |
|---|----|
| Investigative Reporter on Russian and U.S. Bacteriological Weapon Programs [Sergey Leskov; IZVESTIYA, 26 Jun 93] | 13 |
| New 'Super Computer' Should Reduce Nuclear Tests 30 Percent [ITAR-TASS, 28 Jul 93] | 17 |
| Cooperation With Japan in Nuclear Power Engineering [ITAR-TASS, 28 Jul 93] | 17 |
| Problems With Storage of Chemical Weapons in Udmurtia [MAYAK RADIO NETWORK, 29 Jul 93] | 18 |
| Supreme Soviet Decree on MTCR Related Treaties [ROSSIYSKAYA GAZETA, 31 Jul 93] | 18 |
| Official Documents on Mirzayanov CW Secrets Case [MOSCOW NEWS, 9 Jul 93] | 18 |

ESTONIA

| | |
|---|----|
| Government Guarantees Not To Produce Chemical Weapons [ETA NEWS BULLETIN, 23 Jul 93] | 19 |
|---|----|

KAZAKHSTAN

| | |
|--|----|
| India Offered Space Facilities, Fuel for Nuclear Power [Moscow RADIO ROSSIY NETWORK, 24 Jul 93] | 19 |
|--|----|

UKRAINE

| | |
|--|----|
| Gamma-Radiation Unit Stolen From Enterprise [HOLOS UKRAYINY 24 Jul 93] | 19 |
|--|----|

U.S. Charges of Missile Shipment Fabricated

BK2407092493 Hong Kong AFP in English 0747 GMT
24 Jul 93

[Text] SINGAPORE, July 25 (AFP)—Chinese Foreign Minister Qian Qichen on Saturday denied U.S. charges that Beijing had shipped components for missiles to Pakistan.

The claims were "without foundation" and "simply fabricated," said Qian, who will hold talks with U.S. Secretary of State Warren Christopher here Sunday.

Qian, responding to a question at a luncheon hosted by the Foreign Correspondents Club of Singapore, said he the U.S. allegation would not cloud his talks with Christopher.

"I hope through this meeting our two sides will give impetus to improvement in relations," he said.

Qian is believed to be the most senior Chinese official to respond to the U.S. charge that Beijing had secretly shipped components for M-11 missiles to Pakistan.

Washington has said it has compelling evidence to back its claim. The missiles with a range of about 450 kilometres (300 miles) are believed capable of carrying nuclear weapons.

Christopher is due in late Saturday for talks with foreign ministers of the Association of Southeast Asian Nations (ASEAN), who are holding their annual meeting here.

Qian said he hoped his talks with Christopher would be satisfactory and constructive despite the U.S. allegations.

Chemical Weapons Analysts Meet in Beijing

OW2307105193 Beijing XINHUA Domestic Service
in Chinese 1123 GMT 21 Jul 93

[By correspondent Lin Maoxing (2651 5399 5281)]

[Text] Beijing, 21 Jul (XINHUA)—At the fourth round of a joint international laboratory test for the verification of disarmament of chemical weapons—in which 14 countries participated, including the United States, Russia, Britain, and France, and 16 laboratories—China's analysis and measurement again ranked among the best. This was in the wake of China's outstanding performance in the second and third rounds of testing. China's discovery rate was high, its quantitative analysis was accurate, the method it used was advanced, and its system of quality control was comprehensive. China's performance indicates that its chemical analysis and verification technology is in the forefront of the world. Zhang Wannian, chief of the General Staff, has congratulated the personnel who took part in the test.

The joint international laboratory test for the verification of disarmament of chemical weapons is an important effort to ban chemical weapons. Samples for the test were provided by the United States' Lawrence-Livermore National Laboratory. Compared with the previous two rounds, this round of the test had higher technological requirements and was more difficult. Its requirement for a comprehensive system of quality control was even more rigorous. In light of this, our personnel taking part in the test pooled their wisdom and efforts and meticulously analyzed the samples with a rigorous scientific approach. They verified the results of the analysis in various ways to ensure the accuracy of the test.

At a recent meeting of experts for the fourth round of the test in Britain, foreign experts praised China's analysis and measurement work, saying it was well done.

It was learned that the People's Liberation Army institutions specializing in antichemical warfare have worked very hard to study the test for the verification of disarmament of chemical weapons over many years and have scored numerous high-tech research results.

JAPAN**Support for Indefinite Extension of NPT Unveiled**
*OW2807093393 Tokyo KYODO in English 0900 GMT
28 Jul 93*

[Article by Masanori Kikuta]

[Text] Singapore, July 28 KYODO—Japan on Wednesday [28 July] gave the first clear indication of its readiness to support an indefinite extension of the Nuclear Non-Proliferation Treaty (NPT) beyond its expiry in 1995, inviting a quick welcome from the United States.

"Because of the general election that we had recently, there remain some procedural matters to be take care of," said Foreign Minister Kabun Muto said of Japan's final decision on the issue.

"However, we should continue to make efforts to move in the direction of an indefinite extension of the treaty."

Muto made the remarks at a joint news conference with his colleagues of other dialogue partners of the Association of Southeast Asian Nations (ASEAN) at the end of an annual regional ministerial meeting.

"I think it is a very positive step forward in terms of the extension of the treaty," said Winston Lord, U.S. assistant secretary of state for East Asian and Pacific affairs.

"We were pleased to hear his comments," Lord told reporters afterward.

Japan stopped short of showing clear-cut support for an indefinite extension during the Tokyo summit of seven major economic powers earlier this month.

Coupled with its controversial two-month shipment of plutonium from France that ended last January, the indecision has aroused international suspicion about Japan's policy of not possessing, producing or allowing nuclear arms into its territory.

Muto said that during a closed session of the meeting he went beyond what he had said about the NPT issue in his opening address. He explained that he feared the world might misunderstand Japan's position on the nuclear unless he expressed a "more forthcoming stance."

In the address, he only said that for the purpose of strengthening the NPT, it is "necessary to secure universal adherence to the treaty" and lead an expected international conference on its extension in 1995 to a success.

At the news conference, Muto said Japan "wishes to appeal strongly for a significant reduction in nuclear weapons around the world."

The NPT conference will decide whether to extend the treaty for a certain period or indefinitely.

As of last February, 157 countries signed the treaty, which took effect in 1970.

Among countries yet to do so are India, Pakistan and Israel, which are believed to be capable of producing nuclear arms.

North Korea declared in March that it is withdrawing from the pact, rejecting inspections by the International Atomic Energy Agency (IAEA) at two suspected nuclear sites. But after high-level talks with the United States, North Korea announced last month that it is suspending its decision to withdraw from the NPT.

The treaty bars signatories from producing nuclear arms or obtaining them from nuclear powers, and it requires nonnuclear countries to undergo inspection by the IAEA.

NORTH KOREA**Japan Warned Against Nuclear Development**

*SK3007060093 Pyongyang KCNA in English
0443 GMT 30 Jul 93*

[("Who Really Poses Threat?"—KCNA headline]

[Text] Pyongyang, July 30 (KCNA)—Japanese Foreign Minister Muto recently cried that North Korea's "nuclear development" poses a "grave threat not only to the security of the Asia-Pacific region but also to the security of the world community" and that a "determined attitude" should be shown to check it.

Commenting on this, NODONG SINMUN today says that contrary to his remarks, it is not the fictitious "nuclear development" by the Democratic People's Republic of Korea but Japan's nuclear armament that poses a threat to the security of the Asia-Pacific region and the world community.

In a commentary titled "Who Really Poses Threat?" The paper notes:

Japan's nuclear armament is now being stepped up in real earnest at a very dangerous stage.

Japan has long since wanted to be a nuclear power. It has already developed nuclear technologies and nuclear-delivery means. For its stockpile of a larger amount of plutonium than necessary, Japan is called "plutonium power." It is fully prepared to become a nuclear power any time it wants to be.

In raising outcries over the fictitious "nuclear development" by the DPRK, the Japanese authorities are seeking to push ahead with their own nuclear armament under that pretext and fend off the accusing fingers pointed at Japan.

With no amount of trick can they ever cover up their nuclear design or veil their true color as those bringing dark nuclear clouds.

The Japanese authorities must act with discretion.

Pyongyang Reportedly Exporting Midget Submarines to Iran

SK2707012093 Seoul CHOSON ILBO in Korean 27 Jul 93 p 7

[YONHAP report from Cairo]

[Text] Egyptian sources said on 27 July that North Korea exported eight midget-level small submarines to Iran last year.

According to sources, North Korea has also decided to produce another 25 midget-level submarines in the future in cooperation with Iran. For this project, Iran will take charge of the financial issue [chaejongul tam-dang] while North Korea provides the technology.

The source said: The reason for the Iranian Government's import of North Korean-made small submarines is the fact that the water in the Gulf area is only 86 meters deep, and that large submarines cannot be operated in those waters.

The observers predict that the security of the Arabic countries will be seriously threatened if Iran possesses a great many submarines.

THAILAND

Minister To Prepare for Nuclear Plant Construction

93WP0201A Bangkok DAO SIAM in Thai 5 Jul 93 p 5

[Text] Mr. Suchat Mongkhonphan, the secretary general of the Office of Atomic Energy for Peace, said that on 1 June 1993 the cabinet passed a resolution to have the Office of Atomic Energy for Peace; Ministry of Science, Technology, and Environment; take steps to improve its role in ensuring safety in preparation for the construction of a nuclear power plant. At present, data are being studied before recommendations are made on improving the structure of the units and revising various laws in separating the units of the office that will maintain safety and the units that will control the activities of the nuclear power plant. The nuclear reactors at various power plants are being studied, and data and information on atomic and nuclear energy are being disseminated.

The secretary general of the Office of Atomic Energy for Peace said that before a nuclear power plant is constructed, the safety of various locations must be investigated and evaluated in terms of accidents that could affect the lives of the people. This must be done before the year 2006, which is the year that the government plans to start using energy from a nuclear power plant.

As for the people who will staff the units responsible for the nuclear power plant, at present there is no full educational program at the tertiary level. Dr. Thongchai Sumit, the dean of the Faculty of Engineering at Chulalongkorn University, said that such a curriculum will be offered in the near future.

REGIONAL AFFAIRS

Argentine, Brazilian Nuclear Inspection Program Criticized

PY2307032293 Rio de Janeiro *O GLOBO* in Portuguese
14 Jul 93 p 8

[Text] Recife--Brazil and Argentina have an agreement that bans the manufacture of nuclear weapons and promotes mutual inspection, but the Brazilian-Argentine Agency for the Control of Nuclear Materiel (ABACC) still does not have an exact inventory of the uranium and plutonium stocks in the two countries. This charge was made on 13 July by scientists who participated in the meeting of the Brazilian Society for Scientific Development (SBPC) in Recife.

Fernando de Souza Barros, of the Federal University of Rio de Janeiro (UFRJ), said: "That agency already has received reports, but the technicians have not confirmed these reports with inspection visits."

The bilateral agreement for mutual inspection was approved in 1992 by the two countries' congresses. Souza Barros stated on 13 July that until now the agency's efficiency and its implementation as an instrument for the control of nuclear weapons is an unknown factor.

According to the specialists, another problem blocking the implementation of understanding between the two countries is the fact that the Brazilian Congress has not approved the agreement, while Argentina already has,

between the two countries through which the two countries will rationalize the inspections together with the ABACC and the International Atomic Energy Agency.

Physicist Luis Pinguelli Rosa, also of the UFRJ, has indicated that although Brazil has opened up its nuclear sector, it still is very restricted in the military sphere, mainly in the Navy, which is working on a nuclear submarine project. And he suggested that the subject should come under the command of the science and technology sphere instead of being under the sphere of the Strategic Affairs Secretariat. The scientist proposed that pressure be applied on Congress so the nuclear program will be open and clear-cut.

BRAZIL

Former Navy Minister Confirms Nuclear Bomb Production

PY3007012293 Rio de Janeiro *O GLOBO* in Portuguese
29 Jul 93 p 10

[From the "Swann" social column]

[Text] A taboo subject during the military regime, the production of a Brazilian nuclear bomb was confirmed [a fabricacao de uma bomba atomica brasiliense foi confirmada] in statements made by Admiral Maximiano da Fonseca, Navy Minister during the Joao Figueiredo administration, to INTERVIEW magazine, which will hit the stands today.

In the same interview Fonseca labelled the Riocentro IPM [police-military investigation] a "farce."

INDIA

U.S. Blamed For Misusing Missile Technology Control Regime

BK2607101593 *Delhi PATRIOT* in English 19 Jul 93 p 4

[Editorial: "Of Cryogenic Fiasco"]

[Text] So ISRO [Indian Space Research Organization] chairman Prof. U.R. Rao and our External Affairs Ministry were equally ill-informed, or naive, about America's intentions towards India. Prof. Rao's statement at the end of his week-long talks in Moscow was as misleading as had been the Indian External Affairs Ministry's estimate of the strength of U.S. disapproval of Pakistan's terrorist attacks on India. Prof. Rao should have known better. When a person of his authority in India's Science and Technology [S and T] establishment makes an affirmative public statement, after his prolonged talks with the Russians and the Tokyo pow-wow of the Presidents Bill Clinton and Boris Yeltsin, his compatriots were bound to trust his conclusion. He had said that there was no danger to the Russian commitment to sell cryogenic engines and technology. Our S and T establishment, including those engaged in defence-related research, shows signs of cracking up under the twin impact of U.S. pressure and confused thinking in India's political leadership. Key officials of the defence research organisation and the External Affairs Ministry are allowed by the government to be hired by U.S. agencies (institutions). There is a queue of senior Indian scientists in India's sensitive research agencies cadging jobs in America. It would be surprising if the altered priorities in the people who run India's S and T establishment do not colour their judgement. As for the U.S., there is no reason—unless big powers still have respect for national autonomy—why it should not take the fullest advantage of the chaos in Russia and the greed of India's decision-taking elite. It is immoral of America to misuse the MTCR [Missile Technology Control Regime] to ban technologies to which this embargo is not applicable. The MTCR restriction is to be employed against export of equipment and technology that can be used to produce a missile capable of carrying a nuclear warhead. The cryogenic engine technology cannot be employed to produce such a missile. Neither India nor Russia is a member of the MTCR club. In 1992, America imposed a two-year ban on U.S. trade with Russia's space agency, Glavkosmos, India's ISRO. America thus has acquired extra-territorial powers to decide the nature of trade to be permitted between non-cocom countries. This is a new situation. America's perception would determine trade relations between any two countries, and the domestic U.S. laws would be applicable to countries which have not surrendered their sovereignty to the U.S. The sanctions being employed against the countries which devise trade relations in their national interests—if these do not obtain U.S. approval—are more stringent than in the past. The U.S. State Department spokesman has dismissed with insensitivity the possibility that the

U.S. decision would hurt Indo-U.S. relations. The American official was convinced that there would be no such thing if America were to decide to give India some hand-me-down engines from the U.S. shelves. Today's U.S. officials may not know this, but a similar insensitivity shown by the West in the 1950s, when India wanted to expand basic industries soured India's relations with the Western industrial democracies. Then, as now, the U.S.-led Western powers underestimated India's determination to pursue, for economic and technological development, the path of its own choice.

Further Reportage on Russian Cryogenic Engine Deal

Paper Laments Cancellation of Deal

BK2507085193 *Delhi INDIAN EXPRESS* in English 19 Jul 93 p 8

[Editorial: "Sombre Outlook for India"]

[Text] The lone superpower has finally forced its ex-rival to scuttle its deal on the transfer of Russian rocket engine technology to India. The precise terms of the US-Russian agreement reached after arduous negotiations are yet to be divulged. There is, however, ample evidence that the US has assured Russia that the way will now be open for it to secure a substantial part of the growing business in satellite services. Apparently, President Clinton clinched the issue at his meeting with Boris Yeltsin in Tokyo last week. After this, the Russian President found it expedient to go back on his commitment to India on the supply of rocket technology if not cryogenic engines meant for weather satellite programmes. The Indo-Russian contract does contain a provision for its termination in exceptional circumstances. A force majeure clause like this is a normal part of most commercial contracts. Moscow will cite the provision to defend its decision to renege on one part of the contract, that relating to transfer of technology. New Delhi, of course, knows that the deal has fallen prey essentially to the post-Cold War aggressive diplomacy of the US. Its aim is to promote American commercial interests as well as to check the spread of missiles as a part of its nuclear nonproliferation policy. In the present case, Washington has undoubtedly a major achievement to its credit inasmuch as it has virtually got Russia at long last to accept the obligations dictated by the controversial Missile Technology Control Regime (MTCR).

The US-Russian coup has confronted India with a grave challenge. It has to revise its strategy to ensure that its space programme does not suffer to the detriment of a wide range of crucial economic activities such as boosting agricultural production, flood and forest management, communication meteorology and satellite-based television and radio services. Although the sale of the contracted rocket engines will be affected by the US-Russian accord only partially, the net loss to India as a result of this curtailment is yet to be ascertained. This country's space technology is reported to be well

advanced. But the biggest constraint is paucity of funds especially for the further development of the technology.

Uninterrupted progress in this field is vital especially from the security point of view. There is no evidence of repeated US concern over the supply of ballistic missiles by China to Saudi Arabia and M-11 missiles to Pakistan having had the desired effect. No government in New Delhi can disregard the threat posed by this environment. The US flaunts the MTCA as though it were a magic wand certain to bring heavenly peace to earth. The reality facing India is so grim that it just cannot afford to fail to master the missile technology as soon as possible. Whatever the sacrifices involved, this objective must be achieved.

Indigenous Production of Engines Possible by 1997

*BK2907005693 Delhi INDIAN EXPRESS in English
22 Jul 93 p 9*

[By M. A. Deviah: "Indian cryogenic engine by 1997?"]

[Text] Far from delivering a crippling blow to the Indian space programme, the US-inspired cancellation or 'freezing' of the Rs 230-crore cryogenic rocket deal by Russia may actually boost indigenisation efforts. According to sources in ISRO [Indian Space Research Organization], with or without sanctions an indigenous cryogenic rocket engine could be ready by 1997.

Surprisingly, the mood that prevails in ISRO's Bangalore headquarters is not one of shock and anger but of quiet determination. Scientists have access to much of the technology as the transfer of Russian cryogenic technology started almost immediately after the agreement was signed in early 1991. ISRO teams have already been working on the project with Glavkosmos, the Russian space agency.

According to Union Minister of State for Science and Technology P.R. Kumaramangalam, the detailed plans for the engines are already with ISRO. But the plans alone are not enough for ISRO to build the engines. Cryogenic engines use liquid hydrogen and oxygen fuels kept at below minus 100 degree centigrade. At that temperature, metal becomes brittle and can crumble like a wafer. Building a cryogenic engine requires special metal alloys that can withstand the super-cold temperatures.

ISRO's Liquid Propulsion Systems Centre has already developed a one-tonne cryogenic engine, which feeds fuel into the engine by using pressure. This must provide some optimism, but there is still much research to be done before the 12-tonne engine needed for the Geostationary Satellite Launch Vehicle (GSLV) is developed. A further complication is that fuel in the GSLV engine will have to be fed by a turbo-prop to save on weight.

Still, ISRO has had a good record as far as indigenisation goes. When the American sanctions were first slapped on

the organisation, ISRO had all the parts required for INSAT 2A and most of the parts for INSAT 2B. ISRO is now on the verge of launching INSAT 2B and is quite confident that INSAT 2C will go up on schedule at the end of 1994.

Among the crucial components that ISRO developed for itself were radiation hardened integrated circuits, which was till then available only from the US. ISRO scientists developed their own way of imparting radiation hardening.

Admittedly, the Indian method makes the integrated circuits heavier than they would normally be, but the bottom line is that they go up and do the work. Similar attempts to indigenise kevlar, a composite material used in satellite construction, at the National Aerospace Laboratories has borne fruit.

ISRO Chairman U.R. Rao, now in French Guyana to supervise, the INSAT 2B launch had estimated early this year that indigenisation would cost the space programme an additional 10 per cent and would push the time-table back a little.

Though the U.S. is using the pretext of the Missile Technology Control Regime (MTCR), the real reasons, are rooted in crass commercialism. According to scientists, the US is disturbed over the fact that India, with its launch-pad at Sriharikota, which is said to enjoy the second-best positioning in the world, can emerge a competitor to the Americans and French in the satellite launching business.

Already, the emergence of the Russians and Chinese offering launches at half the prices being demanded by the West has disturbed the Western cartel. With an increasing number of countries—such as Korea, Taiwan, Thailand and Malaysia—wanting to put up their own satellites, another player in the satellite launching field is certainly not in US interest.

Space Research Organization Official Cited

*PM2907122393 Moscow ROSSIYSKAYA GAZETA
in Russian 29 Jul 93 First Edition p 7*

[Report from ROSSIYSKAYA GAZETA/ITAR-TASS roundup under the "Yesterday, Today, Tomorrow" rubric: "Talks With Russia Necessary"]

[Text] "The contract for Russia to deliver cryogenic rocket engines and the transfer of the corresponding know-how to India can be frozen for six months only; before this it is necessary to hold talks with Russia and reach an agreement for settling the existing situation. If the bilateral contract is annulled, we will take the case to arbitration."

A statement was made to this effect in Delhi by Professor U.R. Rao [name as transliterated], chairman of the Indian Space Research Organization. THE HINDU reports that he also noted that India is not interested in

acquiring just the cryogenic rocket engines from the Russian Federation, without receiving the corresponding know-how.

According to U.R. Rao, the Indian side has already paid 1.02 billion rubles (roughly \$33 million) of the total cost of the contract signed between the Indian Space Research Organization and the Main Administration for the Development and Use of Space Technology for the National Economy and Scientific Research in 1991, for the fulfillment of some clauses of the contract.

IRAN

Commentary on Sale of Chinese M-11 Missiles To Pakistan

LD2607213993 Tehran Voice of the Islamic Republic of Iran in English 1930 GMT 26 Jul 93

[Unattributed commentary]

[Text] The Chinese foreign minister and his U.S. counterpart have met and conferred in Singapore simultaneously with the session of the Association of South East Asian Nations, ASEAN. As reported, the two sides during the 90 minutes meeting discussed various international issues of mutual interest.

The main topic of the talks was the controversial issue concerning the alleged sale of M-11 missiles by China to Pakistan. Apparently America believes that China has violated the Missile technology Control Regime—MTCR—concerning the sale of missiles having the range of 450 kilometers. This is at a time when the Chinese Government has repeatedly stressed its adherence to international agreements.

U.S. persistence in accusing China of selling the components of M-11 missiles to Pakistan made the talks between the Chinese Foreign Minister Qian Qichen and U.S. Secretary of State Warren Christopher inconclusive. Despite this, it has been reported that the talks would be resumed during the trip of the U.S. assistant secretary of State to Beijing. Also, one of the U.S. officials who was present at the talks between the Chinese foreign minister and his U.S. counterpart, has stated that Warren Christopher has received a letter from Qian Qichen that has been addressed by the Chinese President to U.S. President Bill Clinton in connection with the request for not carrying out nuclear tests.

There may exist various reasons as to why the U.S. Administration continues to level charges against China despite its strong denial on a number of occasions. Despite this, the issue worth pondering in the case of Pakistan is the general U.S. opposition which involves the Islamic world. Under this theory America feels unhappy with the access to the relatively advanced weapons of any Muslim country even though its government may be an ally to Washington. This is a part of the

U.S. strategy as well as the commitments which it has been following in order to protect its imperialistic base in the Middle East, namely Israel. Naturally, Pakistan's access to the most sophisticated weapons, including M-11 missiles as contended by America, would be contrary to the U.S. strategy.

But the noteworthy issue with regard to China is that the U.S. is concerned about the independence of action of that country in adopting certain decisions which are guided solely by national interests. For those very reasons, America by asserting various claims, is seeking to exert political and trade pressures on China, and this has gone to the extent where U.S. President Bill Clinton is threatening Beijing with economic sanctions in the event of continuing its present policy.

It must be kept in mind that China is in a position to respond to the U.S. threats. The leverage of economic sanctions which the U.S. president wants to apply to China will prove to be equally detrimental to America as well. It is not known as to whether America's big industrial corporations which have established trade ties with China on a more reliable pattern will back Clinton on the subject. Beside this, China has the highest rate of economic growth, while America is faced with economic recession. Therefore, it will not be in the trade interest of Washington to deepen the rift to such an extent where it may confront the problem in having access to the world's greatest market.

It is imagined that China is trying to differentiate between arms sales where America is the biggest exporter and ordinary trade ties. On this very ground one can believe that China will remain adhering to its international commitments, but will not feel itself dutybound to observe the U.S. views. The reason is that China will prefer national interest and independence of action in its relations with various states of the world to its trade ties with America. This appears to a large extent to be something natural.

Tehran Hopes To Conclude Nuclear Deal With Russia 'Early'

PM2707153693 London AL-SHARQ AL-AWSAT in Arabic 26 Jul 93 p 1

[Unattributed report: "Contacts With a View to Signing Nuclear Cooperation Deal Between Iran and Russia"]

[Excerpts] Tehran, London, AL-SHARQ AL-AWSAT—Official sources yesterday revealed that Iranian and Russian experts will meet in Tehran next month to put the final touches to plans for a major nuclear development program in Iran.

Tehran hopes to conclude the deal early so that Russian President Boris Yeltsin can sign the new cooperation treaty when he makes his first official visit to Iran. [passage omitted]

The project in question includes the establishment of two nuclear power stations in the center and south of Iran and the training of hundreds of Iranian technicians in Russia. The project also includes building a nuclear research center, probably in Esfahan.

The United States warns that the project is bound to speed up Iran's acquisition of military nuclear technology and change the balance of power radically in that sensitive region. The Clinton administration has asked Russia to reconsider the initial agreement concluded with Iran in the days of President Mikhail Gorbachev.

The experts' meetings have been postponed three times so far—which reflects hesitation in Moscow whether to go ahead with the deal or abandon it. But Iran is keen to commit Russia to long-term projects, including huge arms sales.

Iranian sources say that Yeltsin is unlikely to visit Tehran before the end of the year. The Russian president is under mounting pressure from Washington to cancel all the contracts concluded with Iran relating to "dual-purpose" equipment and technologies.

But Russia is experiencing severe difficulties, compelling it to look for any source of hard currency, and believes that the financial profits it will reap from its sales to Iran are a tempting and irresistible source. [passage omitted]

Iranian Ambassador to Moscow Nematollah Yazdi said in a press interview yesterday that Tehran is willing to provide "all the necessary guarantees and assurances" that the nuclear project will not be used to develop mass destruction weapons. He added: "I hope we will reach a complete agreement and President Yeltsin will be able to visit Tehran." [passage omitted]

IRAQ

Missile Plant Reported in Tall 'Afar
93PS0235A Doha AL-SHARQ in Arabic 4 Jun 93 p 1

[Text] Baghdad, exclusive to AL-SHARQ—Reliable, informed Iraqi military sources have affirmed to AL-SHARQ that Iraq is currently building a short-range missile manufacturing and research complex in the city of Tall 'Afar near Mosul under the supervision of Husayn Kamil al-Majid, the Iraqi president's special advisor for military industrial affairs. The sources added that the new project is not a violation of the sanctions imposed by the United Nations on Iraq, which are restricted to the manufacture of nonconventional weapons and long-range missiles. The new project has been given the name "An al-Yatim Complex."

Text of 'Official Letter' to UN Security Council

JN2207192593 Baghdad Republic of Iraq Radio Network in Arabic 1805 GMT 22 Jul 93

[“Text” of “official letter” from Iraqi Foreign Minister Muhammad Sa'id al-Sahaf to UN Security Council President David Hannay on 20 July—read by announcer]

[Text] His Excellency Sir David Hannay, UN Security Council President, New York.

Your Excellency: We received Rolf Ekeus, the chairman of the Special Commission, on Thursday, 15 July 1993. We held talks with him that lasted several days. Taking part in those talks on the Iraqi side were the deputy prime minister, the foreign minister, and a number of senior officials. For our part, we welcomed this visit as a UN Security Council initiative to hold a dialogue with Iraq on disputed issues. Our welcome reaffirms Iraq's serious desire to resolve all pending issues through a serious, responsible dialogue built on just, fair, and logical bases that are in line with international law and the UN Charter.

Having exchanged views in a fair and objective manner during the first three rounds of talks, we wished to present to Rolf Ekeus and through him to the UN Security Council a position paper. This paper clearly reflects Iraq's view of the relationship between Iraq's responsibilities toward the UN Security Council and the resolutions that it has issued, and the responsibilities of the UN Security Council as an institution and the Security Council member states toward Iraq as a free, independent country and a founding member of the United Nations. It also concerns their responsibilities toward Iraq's legitimate, inalienable right to sovereignty, independence, territorial integrity, and security, and toward its rights to a free, honorable life as an ancient country with a prominent role in human civilization. Of course, in his capacity as the chairman of the Special Commission, Rolf Ekeus could not speak on behalf of the Security Council on topics that are outside the jurisdiction of the commission. However, we took this opportunity to review our position before the council. Here we are presenting before the council the full text of this paper:

A position paper presented by Iraq to Rolf Ekeus on 18 July 1993:

Iraq understands that implementing its obligations under Part C of Resolution 687—and this has been accomplished—obliges the council to implement Paragraph 22 of the same resolution. However, this has not happened. Thus, out of its desire for further cooperation with the council and the special commission to reach a resolution to pending issues and to lift the blockade imposed on its people, Iraq proposes the following suggestions:

1. Iraq is prepared to comply with the provisions of the future surveillance and verification plan in accordance with Resolution 715 of 1991.
2. In implementing the said plan, the Security Council and Special Commission pledge to respect Iraq's sovereignty, internal security, and the dignity of the people and the state.
3. The Security Council and the Special Commission pledge to implement the said plans while guaranteeing Iraq's right to industrial, scientific, and technological progress, and development in all areas not banned by Resolution 687.
4. In implementing the surveillance and verification through aerial means, the Special Commission uses—whenever necessary—Iraqi means such as helicopters and surveillance planes instead of non-Iraqi means. It is possible to use other means agreed upon by the two sides.
5. The Special Commission should be committed to implementing the tasks of surveillance and verification in the nuclear, chemical, and biological fields in accordance with the bases and means provided for in valid international charters.
6. The Security Council and the Special Commission pledge to implement Paragraph 22 of Resolution 687 immediately and fully and without additional conditions.
7. The Security Council pledges to lift the embargo provided for in Paragraph 24 of Resolution 687.
8. The Security Council and the Special Commission pledge to seriously and immediately work for implementing Paragraph 14 of Resolution 687—in which the council noted that the measures Iraq will take in accordance with the paragraphs related to weapons of mass destruction are considered steps toward the creation of a region in the Middle East free of weapons of mass destruction and of their launchers and toward imposing a world embargo on chemical weapons—and that the measures of embargo, surveillance, and verification imposed on Iraq, including those in the field of ballistic missiles, be part of plans to be applied on other countries in the region without exception. It is natural to reiterate Iraq's right to benefit from any advantage resulting from implementing these measures on countries in the region.
9. Taking into consideration the council's reiteration in the preamble of Resolution 687 that all member states are committed to respecting Iraq's sovereignty, territorial integrity, and political independence—thereby forming a general and categorical commitment by all states, including the Security Council member states—Iraq asks the Governments of the United States, the United Kingdom, and France—in accordance with their obligations stipulated by the Charter, in their capacity as permanent members of the Security Council, and in light of their commitments stipulated by the Security Council resolutions issued in accordance with Chapter 7,

including Resolution 687—to fully respect Iraq's sovereignty, security, and territorial integrity, to immediately end the no-fly zones imposed south of the 32d parallel and north of 36th parallel, to stop violating Iraq's airspace, and to stop interference in its internal affairs.

Mr. President: A fair and balanced reading of Iraq's position paper will show it to be truly interested in resolving outstanding issues and reassuring the Security Council regarding future surveillance, now that all the substantive aspects of Part C of Resolution 687 have been completed. The paper also makes clear that the other provisions of the resolution have been implemented.

It is natural that Iraq should expect the Security Council to take a fair stand on its obligations as spelled out in the Charter and its own resolutions, which call for honoring Iraq's sovereignty, independence, and internal security and territorial integrity. It is equally natural that Iraq should expect the unfair embargo that was slapped on it three years ago, causing the the civilized Iraqi people extreme suffering, should be lifted. Iraq also expects the lifting of the tight controls that have ceased to have any justification.

We hope that the paper presented by Iraq and the negative and positive results of Mr. Rolf Ekeus' 15-19 July visit to Baghdad will mark a turning point in the UN Security Council's stand on substantive issues and Iraq's legitimate demands.

Iraq hopes the Council will study the implementation of Paragraph 22 of Resolution 687 without delay as a first step toward addressing its legitimate demands. Such a step would be warmly welcomed by the Iraqi people and would spur more constructive relations between Iraq and the council.

Iraq urges the council to work in that direction and not to ignore the substantive and legitimate considerations that Iraq incorporated in this paper, which is based on justice and fairness and calls for the implementation of the Council's moral and legal obligations toward an independent member of the United Nations.

Any unwanted consequences of the council disregarding Iraq's substantive and legitimate demands will be borne by those who are pushing in this direction.

Iraq, which pressed for dialogue with the Security Council in a letter from the foreign minister on 30 May 1993 and evinced a responsible and positive attitude during the head of the UN Special Commission's visit to Baghdad, renews the demand for dialogue with the council or its permanent members, in addition to the high-level technical dialogue with the Special Commission that will address all outstanding issues and seek to remove all suspicion and obstacles to the building of relations based on mutual understanding and cooperation between Iraq and the council.

Iraq further wishes to pursue its constructive contacts with the UN secretary general to promote that goal.

Please accept our best regards. [Signed] Muhammad Sa'id al-Sahaf, foreign minister of the Republic of Iraq, Baghdad [Dated] 1 Safar, 1414 Hegira, corresponding to 20 July 1993.

JORDAN

'Western Sources' Report Mirage, Other Aircraft For Sale

*JN2607134393 Amman AL-MASIRAH in Arabic
26 Jul 93 p 1 (tentative)*

[Text] Western defense sources have confirmed that Jordan has sold several combat aircraft, military transport planes, and helicopters over the past few months.

Other Western sources reported that Jordan is currently offering to sell 14 Mirage F-1 aircraft. Greece and Spain are considering purchasing these aircraft, which, according to the sources, are in good condition because of their low number of flight hours.

The same sources said selling 14 Mirage F-1 aircraft will provide \$200 million for the Jordanian treasury.

Western sources have also noted that Jordan plans to sell four U.S. F-5 Tiger combat aircraft to Indonesia. The U.S. Administration had previously barred the deal on the grounds of human rights violations by the Indonesian Government against the opposition.

PAKISTAN

Urdu Daily Assails U.S. Stand on Missile Program

*BK2507133593 Rawalpindi NAWA-I-WAQT in Urdu
25 Jul 93 p 10*

[Editorial: "One More Example of the U.S. Discriminatory Treatment"]

[Text] According to a U.S. State Department spokesman, a U.S. official is likely to warn the Chinese leadership during their disarmament negotiations in Beijing next week that China's supply of missiles to Pakistan may have serious consequences, including possible U.S. economic sanctions against China. So far as China's defense cooperation with the Third World countries, including Pakistan and other Islamic countries, is concerned, the U.S. administration has long been carrying out negative propaganda against it. Earlier, during the Iran-Iraq war, China was accused of supplying "Silkworm" missiles to Iran, and now it is being alleged that the Chinese Government is supplying M-11-type long-range missiles to Pakistan. In May this year also, when President Clinton extended the most favored nation status to

China, the U.S. intelligence agencies briefed him that these missiles were supplied to Pakistan in the form of parts.

The U.S. latest warning to China has come close on the heels of reports that U.S. Secretary of State Warren Christopher is scheduled to meet the Chinese foreign minister in Singapore next week. The U.S. administration's pressure tactics—adroitly brought into play before the upcoming arms reduction talks—are designed to tilt the outcome of arms negotiations in its favor.

Pakistan's missile program is, undoubtedly, of a very limited nature and was started, moreover, in the face of a massive and well-organized missile development program being pursued by India. Under its ongoing program, India has taken steps to acquire the technology to develop long-range missiles, and development of its medium-range missiles is already in the final stages. As a result of this program, India has now achieved the capability of firing nuclear weapons with the help of these missiles. While India has been developing missiles locally to meet its forces' requirements, it has also been trying to acquire missiles and their technology from Russia. It is, therefore, ironic that instead of pressuring India to abandon its offensive missile development program, the U.S. administration has given New Delhi an open license and is now forcing China not to cooperate with Pakistan in this field. Thus, the discriminatory treatment meted out to Pakistan in connection with its nuclear and other programs is not justifiable under any code of ethics.

Paper Reviews U.S. Ties, Urges Adherence to Nuclear Policy

*BK2607144793 Rawalpindi NAWA-I-WAQT in Urdu
26 Jul 93 p 10*

[Editorial: "Nuclear program and Pakistan-U.S. relations"]

[Text] According to a newspaper report, decisive talks between Pakistan and the United States will begin shortly to eliminate the coolness in their relations and the rift on the nuclear issue. According to the report, the Pakistani charge d'affaires in Washington and Pakistan's UN envoy Jamshed Marker have held preliminary talks in this regard. Pakistan-U.S. relations have been experiencing ups and downs from the very beginning. This is actually due to the U.S. attitude, and it is a very usual phenomenon in its dealing with its allies and friends. Pakistan aligned with the United States in Southeast Asia Treaty Organization and the Central Treaty Organization and acted as the biggest hurdle to the spread of communism in this region. But when it needed U.S. help in confronting its eternal enemy India, the United States refused, citing the 1959 agreement. On the contrary, India's ally—the Soviet Union—wholeheartedly supported India and played a role in dismembering Pakistan.

The United States once again became generous to us and let the economic and military assistance flow when it needed Pakistan after the Soviet invasion of Afghanistan in 1979. Then the U.S. posture again changed after the Soviet Union's smashing defeat in Afghanistan. After stopping economic and military aid to Pakistan, the United States is now exerting pressure on its friends to deprive Pakistan of any assistance. Talks have also been continuing for the last year about declaring Pakistan a terrorist state and Pakistan's nuclear program is being made a specific target of criticism. Given this situation, a fresh U.S. offer of restoring warm relations deserves cautious consideration.

Having no popular elected government in the country at present, there is a great danger of the United States becoming successful in making the government take some fundamental decisions on the nuclear issue either by exerting pressure or by enticing with a promise of economic aid. The fact is that the nation is very sensitive on the issues of Pakistan-India relations and the nuclear program, and it is not willing to allow any government to think of a rollback of the program under U.S. pressure or to be ready to accept any sort of U.S. conditions. Of course, if the United States realizes its mistake and is now willing to develop cordial relations with Pakistan under the existing economic, political, and defense policies, then it is welcome. The fee for excluding Pakistan from the list of terrorist states should never be paid in the form of rolling back its nuclear program.

Prime Minister on PRC Missiles

BK3007091993 Islamabad Radio Pakistan Overseas Service in English 0800 GMT 30 Jul 93

[Excerpts] The caretaker prime minister, Mr. Moin Qureshi, has said Pakistan would support any settlement of its dispute with India over Kashmir that takes into account the will of the Kashmiri people. [passage omitted]

Referring to the nuclear question, he said Pakistan was anxious to resolve it. However, it cannot take (?bold) steps unless there is a reciprocal reduction and action on the part of the neighboring country. He said Pakistan's objective was to maintain a deterrent. It is not Pakistan's intention to move to any next stage or creating nuclear weapons. [passage omitted]

Replying to a question about the supply of Chinese missiles to Pakistan, he said Pakistan had not received any equipment or material from China that violated the Missile Technology Control Regime.

Nuclear Capability Charged, Denied

Former Army Chief Claims Nuclear Capability
PM2607142293 Paris LE MONDE in French
25-26 Jul 93 p6

[Patrice de Beer report: "Islamabad Has Had Nuclear Weapons Since 1987"]

[Text] Pakistan successfully carried out its first nuclear test in 1987, the former chief of staff of the Pakistani army revealed on Thursday 22 July.

Answering questions from local daily AWAZ INTERNATIONAL, General Mirza Aslam Beg said that Islamabad "crossed the (nuclear—LE MONDE editor's note) line in 1987...very successfully carrying out laboratory tests. Nobody should doubt it," he explained, denying repeated reports to the effect that tests had been carried out in China—a country with which Pakistan has long had technological cooperation in the nuclear and ballistic spheres. "Our capacity to manufacture nuclear bombs is identical to that of India," which exploded its first nuclear device in 1974, the general added. The same day, former President Ghulam Ishaq Khan, who resigned a week ago, said he had been "threatened with physical elimination because of my position on the nuclear question." Referring to American pressures, he indirectly confirmed Gen. Aslam Beg's remarks, stating in particular: "I did not give in to those threats, because the nuclear program is linked to Pakistan's security and survival."

The fact that India has not invaded Pakistan "is solely due to our nuclear capability." It is obvious that he was not referring to the civilian nuclear potential of his country which has hitherto always maintained—despite the accumulation of evidence to the contrary—that it was only developing this technology for peaceful purposes. The Indians and Pakistanis have still not signed the Nuclear Nonproliferation Treaty.

Pakistan's possession of the nuclear weapon was an open secret which local officials scarcely even bothered to deny. For instance, in 1992, the foreign ministry spokesman admitted that Islamabad had "a certain capability in the nuclear sphere," but that its military program was "frozen" at its 1989 level. In 1988, Benazir Bhutto had stated that Pakistan would have had nuclear weapons in 1977 if her father Zulfikar Ali Bhutto—promotor of the "Islamic bomb"—had not been overthrown.

Neighboring India—without much sincerity because it was first to equip itself with nuclear weapons—and especially the United States have made no secret of their anxiety about Pakistani ambitions for many years. When the promises of the Islamabad leaders lost all power of conviction, Washington opposed the supply of equipment and technology enabling them to achieve their ends. In 1990, the Americans put an end to their military aid to an old ally on which they had relied to help the anti-Soviet resistance in Afghanistan. More recently, they condemned China for supplying aid—and recently missiles in kit form—to Pakistan.

France, for its part, was tempted to sell Pakistan an irradiated fuel reprocessing plant but finally and wisely decided to abandon the plan at the end of the seventies. At the time, in 1979, an excessively curious French ambassador was beaten up near the Kahuta power station. That was when Islamabad was trying by all possible means to complete its program.

In 1988, Bonn suspended the activities of the German firm Nukem which was suspected of supplying fissionable material to Pakistan and Libya which was once accused of financing the Pakistani nuclear program.

Things are now clear, even if the interim government in Islamabad has not yet admitted anything. But this clarity merely strengthens the threat of nuclear proliferation on the Indian subcontinent. This is probably the only region in the world where the risk of a conflict between two nuclear powers remains. This risk is due to ethnic and religious disputes there which have recently intensified, particularly in Kashmir, over which the two countries are quarreling.

Nuclear Expert 'Does Not Know' of Beg's Nuclear Test Claim

*BK2607113793 Islamabad THE NEWS in English
26 Jul 93 p 4*

[Text] Karachi—Dr. Abdul Qadeer Khan, the renowned Pakistani nuclear scientist, has said that he does not

know that Pakistan has ever made any experimental nuclear explosion.

Commenting on General (Rtd.) [retired] Aslam Beg's statement that Pakistan had made the explosion, Dr. A.Q. Khan said that "it might be in the knowledge of Gen. Beg", however, there is no such thing in our quarters.

A.Q. Khan, who was talking to pressmen after the Karachi University Convocation on Sunday at the campus reiterated that Pakistan's nuclear programme was for peaceful purpose and it would be continued.

Earlier, he was conferred honorary degree of Doctor of Science for his monumental contribution towards the development of Pakistan's nuclear programme.

The Sindh Governor Hakimi Said, who is also the Chancellor of the university conferred on him the "Honoris Causa."

RUSSIA

Investigative Reporter on Russian and U.S. Bacteriological Weapon Programs

93A30072A Moscow *IZVESTIYA* in Russian 26 Jun 93
p 15

[Article by Sergey Leskov: "Plague and the Bomb: Russian and U.S. Military Bacteriological Programs Are Being Developed in Deep Secrecy, and Present a Terrible Danger to the World"]

[Text] If you drove with your eyes closed through Fort Dietrich, a dull, unassuming town in the state of Maryland, you wouldn't miss a thing. It is typical small-town America, where police in [one word illegible] Chevies wake up only to lazily chew another hamburger. It would be impossible for the casual observer to guess that here in the middle of nowhere, great things that are the object of endless disputes among the leaders of the superpowers are happening.

It is here in Fort Dietrich, deep within a closed zone, that the Military Medical Research Institute of Infectious Diseases is located. It is the Pentagon's head organization in the bacteriological weapons program, and it absorbs around 70 percent of the federal budget allocations for such research. In the 1980s Fort Dietrich was mentioned in many sensational articles as the place where AIDS, which is now assaulting the planet, was developed in test tubes. And although this version has not proven itself to be true, the institute continues to enjoy dubious glory.

It is extremely difficult to get into the institute: It took several weeks for the Russian embassy, the U.S. State Department and the U.S. Defense Department to sort out my identity. As bureaucratic logic would have it, it was of particular significance that this *IZVESTIYA* correspondent was representing an independent publication not associated with any official organizations. So it was that I became the first Russian (and Soviet) journalist to receive permission to visit this top secret Pentagon facility.

I had been gathering materials on bacteriological weapons for several years. Of all the forms of mass destruction weapons, they can be considered to be the most mysterious. Not just because bacteriological weapons remain the only ones about the combat application of which dependable information is unavailable. Owing to the very nature of the subtle biological processes occurring, the true goals of many projects in this area remain a mystery even to the best experts. My investigation was aided by support from the MacArthur Foundation—I was able to visit many American organizations, and meet with specialists studying this problem. A comparison of military bacteriological programs of the two countries permits the conclusion that given all of the differences, they are similar in one most important thing: Neither Russia nor the USA offers any guarantees today

of observance of international agreements regarding this form of mass destruction weapons.

AIDS Is Just Kids Stuff

The first thing to strike you in Fort Dietrich is the large number of young, well-built men dressed in hospital smocks. The institute director, Colonel Ernest Takafuji, told me that these men were American army soldiers serving as volunteers in tests of new bacteriological preparations. What is interesting is that according to law, all forms of material stimulation, be they money or extra leave, are categorically prohibited. Before being tested on people, the preparations are tested on rats and monkeys, but the American Society for Prevention of Cruelty to Animals requires a strict accounting of each animal used. Colonel Takafuji, who also possesses the academic degrees of Doctor of Medicine and Doctor of Philosophy, is personally responsible for the health of his personnel.

When it comes to AIDS, Colonel Takafuji is disparaging on the subject. The military feel that this disease has no tactical value. First of all the incubation period is too long. And second, although the means by which the infection is spread might be enjoyable, it is very unreliable, and it yields easily to prevention. The diseases they are studying in Fort Dietrich are distinguished by high combat effectiveness—tularemia, Venezuelan encephalomyelitis, anthrax, and various fevers and toxins.

In an interview with me, Major General Valentin Yevstigneyev, the director of the corresponding direction in the Russian Ministry of Defense, listed absolutely the same diseases as Colonel Ernest Takafuji as being the most dangerous in terms of starting an epidemic. At the same time, there is information that under a veil of secrecy, military biologists have been studying fundamentally new preparations for which there are no vaccines today. As an example they are studying the venom of Mexican spiders in the USA, and some variants of plague in Russia. It is impossible to check this information through official channels.

As far as delivery systems and means of employment of bacteriological weapons are concerned, even here Russian and American specialists agree today. The sabotage and exotic methods that figured into spy movies and which were tested in the 1940s, such as poisoning water basins or parachuting plague-carrying rats, were recognized to be ineffective. Atomization of dry aerosols in air is the most dangerous, since aerosols can be produced by means of systems developed for chemical weapons—conventional missiles and airplanes.

The Wind Rose Gives Its Readings

When the discussion turns to bacteriological weapons, most of us recall the tragedy in Sverdlovsk in 1979, when 69 persons died as a result of the release of anthrax virus from a military laboratory. Evidence of the destructive power of bacteriological weapons can be found in the fact that victims died 24 hours after infection. When

highly placed Russian executives recently admitted to the causes of the tragedy, Western specialists believe that they were clearly not telling the whole story. It is not even clear whether the virus that entered the air was from a weapon or a therapeutic vaccine. In the meantime the truth about this incident is extremely important, though hardly in terms of trying and convicting some officials after so many years. This release remains the sole incident of such a large scale, and its study is required chiefly by science, so that if such events recur, medical personnel could act with the greatest effectiveness.

In the absence of clear information, it is hard to dispute the opinion of the chairman of the state commission working in Sverdlovsk, Lieutenant General Petr Bur-gasov, with whom I spoke in his huge apartment in a building reserved for the Soviet establishment on Kotelnicheskaya Quay. The general continues to insist today that the cause of the epidemic lay not in the release of military aerosols but infection of the population by poisoned meat.

In Harvard University I met with Professor Matte Meselson [transliteration], who is apparently the sole specialist who subjected the Sverdlovsk epidemic to strict scientific analysis. In particular Professor Meselson drew up a wind rose for the period of the epidemic. His conclusion is that most of the vic-tims resided strictly in the direction of the wind on the day of infection. At the same time the professor cannot explain why there were no children or adolescents among the victims. If they were still sleeping in their rooms in the early hour, the probability of infection in a closed spaces should have been even higher, Matte Meselson believes.

There is one other question that leaves no one indifferent. Is it really possible that Yeltsin, who was the blast party committee leader, was ignorant of the real causes of the epidemic back then? This is not at all an idle question. If Yeltsin had known everything before, but remained silent, then how sincerely can we take his promises to henceforth observe international agreements? I have heard many stories regarding this. One of them was this: Whenever General Burgasov telephoned Andropov in Moscow on the government line, Yeltsin had to leave Andropov's office.

In any case Western specialists know far from everything about all of the incidents of this sort in the former USSR. As an example in the early 1980s a brucellosis bacterium leak occurred in the Moscow Scientific-Control Veterinary Institute. A wind gust carried the bacteria into the backyard of the Higher Party School, where nomenklatura workers undergoing advanced training were taking a smoke break. As a result around 15 persons wound up in the resuscitation ward. However, because of the unique nature of the victims, it was possible to maintain secrecy over the incident.

Of course it would be unjust to say that accidents have occurred only in the USSR. In the 1950s, cases of

infection of personnel by anthrax with a lethal outcome were recorded at Fort Dietrich as well. And in 1968, 64,000 sheep died as a result of a toxin leak at a proving ground in Daguz (transliteration). Like in Sverdlovsk, the military denied their role in the incident. In the mid-1970s New York subway passengers were subjected to anti-influenza vaccination by aerosols with the complicity of military biologists, as a result of which dozens of people fell seriously ill.

Microbes Are Above the Law

"We are presently conducting research exclusively for defensive purposes," Colonel E. Takafuji insistently repeated this thought in another context. "We are not creating any kind of substances that could be used for offensive purposes. On the contrary vaccines are being developed for the benefit of all mankind."

I heard statements just as sincere and disarming on many occasions from Russian specialists as well. But one of the mysteries of bacteriological weapons is that even the most sincere assertions of peace-loving intentions do not free either side of suspicions that they are violating international agreements. The mutual mistrust possesses deep roots.

The USSR and the USA began working on bacteriological weapons in the 1930s. The history of their development in both countries is full of enough dramatic pages for a separate story. This work was conducted on a large scale, and as an example, the output capacity of a plant built during the war in Terra Haute, Indiana permitted production of up to a million bombs containing anthrax and 270,000 bombs containing botulinus toxin monthly. The possibility is not excluded that possession of bacteriological weapons by the Allies prevented their use by Hitler, who encouraged work in this direction.

Interest in bacteriological weapons weakened in both the USSR and the USA in the 1960s. The main attention was devoted to developing atomic weapons. Not just because of their higher effectiveness. Experts began to realize that bacteriological weapons are a danger primarily to noncombatants. Moreover viable spores and bacteria are highly resistant, and if the winds turn, the side that first used such weapons could be threatened by mass die-off. All of these ideas played a significant role in the drafting of the Convention on Biological Weapons, which was signed in 1972 by 108 states.

There is no doubt that the convention is a deeply humanitarian document. But there is also no doubt that it is full of contradictions, which not a single specialist can resolve today. The convention prohibits the development of strong-acting and persistent bacteriological substances, it limits the volume developed to just that necessary for research purposes, and it prohibits development of weapon delivery systems and propagation methods. The only kind of research that is permitted is that which is known to support creation of therapeutic and preventive drugs and other means of protection against bacteriological weapons, and in small quantities

at that. However, in contrast to the nuclear arms agreements, this document contains no clear quantitative criteria.

Henry Kissinger immediately turned attention to the convention's ambiguity, noting that in principle, it does not prevent research on offensive substances, inasmuch as such research would be required in order to accurately determine defensive measures. Under this cloak, it would have been easy to portray oneself as peaceable while developing all kinds of bacteriological preparations.

The bitter irony is that work on bacteriological weapons developed especially vigorously precisely after the convention was signed. The accomplishments of biotechnology were the scientific basis for this. In the mid-1970s a highly secret Scientific-Technical Council staffed by the country's leading scientists was established as part of the Main Administration of Microbiological Industry.

The production tasks were imposed upon the large Biopreparat Association, which had shops and plants all over the country. This association was referred to colloquially as "Ogarkov's system," after the name of the general who served as its first director. The system contained 18 scientific institutes employing 25,000 associates, five plants and a large storage facility in Siberia. Several institutes and plants formerly subordinated to purely peaceable departments such as the Ministry of Agriculture and the Ministry of Health also worked for "Ogarkov's system." "Ogarkov's system" did not involve itself in mass production of weapons, but a so-called "mobilization plan" existed. This plan specified the quantity and the sort of concoctions that were to be produced in response to a particular command.

In the "System's" Labyrinths

It is extremely difficult to collect material about "Ogarkov's system." There are still no legislative acts in Russia regulating public access to archives. Not just the latest information but even history long gone is buried in departmental circulars. A question regarding the financing of biological research is no less absurd than a request for permission to carry a suitcase filled with nuclear materials about.

Many specialists who deeply condemn development of offensive bacteriological weapons fear to speak openly on this subject. I made four different appointments for a meeting with one of the specialists, a colonel of medical service, but each time he failed to show up. Finally he gave an honest answer by telephone: He had already been waiting 20 years for an apartment from the "system," and in his old age he did not wish to be left with his principles but without housing. There is also another danger to those who violate the vow of silence. From the standpoint of laws currently in effect, nothing will change if the information that is made public provides evidence of violation of ratified international obligations. All of this compelled me to collect materials

on the status of bacteriological weapons in our country under the conditions of total confidentiality.

As one of the officials of the Scientific-Technical Council tells it, literally all scientists were burning with the desire to work in this forbidden area in the 1970s. There was but one reason, the most earthly—money. Given the traditionally meager financing provided to biological science in the USSR, only the military program provided a possibility for fully productive work.

The research assumed an especially high intensity after replacement of Academician Viktor Zhdanov, the first leader of the council and a man who fell into inertia, by the vigorous and extremely ambitious Yuriy Ovchinnikov. One of the country's youngest academicians, he had an excellent grasp of the party and political hierarchy. He enjoyed access into the highest offices, and he was the recipient of all imaginable state regalia. It was in those years that the truly royal palaces of the Institute of Bioorganic Chemistry, which were under Ovchinnikov's command and which were so eagerly shown to foreign guests as evidence of the party's concern for science, were built in those years in Moscow. Witnesses recall that when scientists tried to cautiously bring him down to earth, Ovchinnikov made no bones about calling them overfastidious to their face, and said that if he got the money, then that must mean that he was right. The academician died quite young, at 54, as if cursed by nature of his work, surrounded by people who immediately began soiling his name.

Every subdivision of Biopreparat was given its own building. The institute in Koltsov, near Novosibirsk, worked with deadly hemorrhagic fever and Venezuelan encephalitis viruses. Plague and anthrax strains needed for experiments were produced in Obolensk. Tularemia was studied and methods of raising the effectiveness of militarily valuable strains were developed in Leningrad.

Field tests were carried out on Vozrozhdeniye Island in the Aral Sea. Unexplained ecological disasters occurred regularly in these places right up until recent years. A massive fish die-off occurred in Aral in 1976. In May 1988 around half a million antelope perished on the Turgay Steppe. In July 1989 an outbreak of plague occurred in the steppes: Entire flocks of sheep lost their wool and died. Need I say that not a single commission seriously investigated these incidents?

Nonetheless, it is asserted today in the Russian Ministry of Defense that Vozrozhdeniye Island is suitable from an ecological standpoint for use as a preserve. It would be extremely interesting to check this out, but I don't know of a single Russian journalist who has been able to visit our bacteriological proving ground. However, it is difficult to reconcile the assertions of the Russian military with the fact that the Anglo-American proving ground on Grunard [transliteration] Island off the coast of Scotland is considered to be uninhabitable for as much as 45 years.

By the mid-1980s the Pentagon realized that it had fallen behind the USSR, and it began devoting greater attention to this direction, increasing the financing from \$16 million in 1981 to \$91 million in 198- [one digit illegible]. It was only in recent years, after the disintegration of the USSR, that funding of the Pentagon for bacteriological research was cut to 40 million.

The West's concern increased especially after the revelations made by Professor Vladimir Pasechnik, who remained in England in 1989. He was the director of the Institute of Especially Pure Biopreparations, which was part of "Ogarkov's system." By the way, this sharp turn in Pasechnik's life was itself interesting. The son of a Hero of the Soviet Union, he became director of the scientific institute at 38 years of age, and he enjoyed fabulous prospects for further growth. But after serving several years as director, the scientist realized the true goals of the program, and in his words, he decided to communicate them to the world public.

A Regime of Mutual Suspicions

It was from Pasechnik that the West obtained a significant amount of information on the Soviet bacteriological program. Following Pasechnik's flight, Doctor Yevgeniy Sventitskiy was appointed director of the institute in Leningrad. The American expert Mark Urban [transliteration] cited the words of an anonymous specialist about the new director: "This is a person who would infect Nevskiy Prospekt with plague if Moscow so ordered." This eloquence is confirmed by Pasechnik's information that it was Sventitskiy who was responsible in his time for carrying out explosions in special chambers with the goal of raising the combat effectiveness of bacteriological weapons. And today the West possesses information that the institute is continuing forbidden research aimed at creating persistent plague strains that are insusceptible to temperature changes or to the action of 16 known antibiotics.

Western leaders have made oral statements to Mikhail Gorbachev on several occasions regarding development of offensive biological programs in the USSR. Gorbachev invariably answered that he would "look into the problem," but he never did do anything. It was only in April 1992 that Russian President Boris Yeltsin admitted that the former USSR had violated the Convention on Biological Weapons, and he prohibited further development of these programs. After this, it became possible for a group of American and English experts to visit Pasechnik's institute, which had fallen under special suspicion, in December 1992.

However, in a press conference in St. Petersburg the Western experts did not even offer a hint of their impressions. At the same time Ye. Sventitskiy and some of our other representatives insisted that the institution had never been directly (?) involved in the military program. It was only in Washington, in the Center for International and Strategic Studies, that I was able to clarify that the overall opinion of the delegation was

basically that in principle, the institute's equipment could be used for work in a forbidden direction; the silence was explained by the absence of obvious violations, and by the impression that the Russian specialists were being insincere.

By the way, complaints of violations of international agreements are a two-way street. I was able to acquaint myself in a certain Russian department with a document containing questions addressed to the American side pertaining to the study of new toxins, to the suspiciously extensive infrastructure, the special equipment and the elevated construction activity at Fort Dietrich, at the Daguz proving ground and in Pine Bluff. Russian experts believe that it is at the Daguz proving ground that "a developed and continually improving infrastructure makes it possible to conduct field tests on synthetically produced biological objects, including ones of a nature unknown to us."

It is not understandable of course why this document is classified, but it is for this reason that I will not risk communicating the name of the department. It may be that in order to have something to say in return, Russia picked these complaints out of the air. Didn't the USA categorically emphasize its faithfulness to the convention, after all? However, Barbara Rosenberg, director of a program for checking the chemical and biological programs of the American Federation of Scientists, and Doctor Meril Nass [transliteration] from Massachusetts University confirmed for me that they see no guarantees that the Pentagon is observing the biological weapons convention. For example, one of the questions pertains to a recent request for the financing of the construction of a new laboratory in Daguz, where large chambers surpassing the need of defensive programs are to be erected. There is information that the USA did not neglect development of prohibited systems for delivering bacteriological weapons in the 1980s. Specialists are also troubled by some specific types of preparations being studied in the USA that could be used to produce new types of persistent offensive substances.

I sought explanations for these things from American officials with great interest. However, Eliza Harris, a department director at the National Security Council, stunned me with something else: Washington knew nothing of what was happening on the Russian side. The impression was that in order to make life difficult for its successors, the previous administration destroyed many files containing information accumulated over 12 years, including on bacteriological weapons. The new associates were unable to get into the swing of things even in May.

I am forced to bitterly assert that the insincerity of politicians, concealment of needed information and bureaucratic maneuvers are compounding the already confused problems of bacteriological weapons. It is simply absurd to hope for public control in today's Russia. And even in America, things are only a little bit better. Gerald Epstein, a division director of the U.S.

Congressional Committee for Technological Assessments, assured me that the press, which would never allow a sensational story to go unreported, was ensuring the USA's observance of international agreements in this area. I would simply not wish to comment seriously on the dependability and effectiveness of such a mechanism.

Bacteria Are Capable Only of Offense

Bacteriological weapons are commonly referred to as the poor-man's atomic bomb, and they can be manufactured in third world countries. The possibility is not excluded that terrorists or simply madmen can use them. Data exist (I obtained this information from Russia's foreign intelligence service) indicating that Egypt, Israel, India, Iraq, Iran, Libya, Syria and Taiwan have conducted biological research of an applied military nature. Pakistan is especially active in this direction. Curiously enough, the Koran categorically prohibits the use of poisons and war gases, and is apparently the first document in human history that limits development of bacteriological weapons. But to our great regret, it is not the last that is violated light-heartedly while observing the strictest conspiracy.

The absence of mechanisms that would regulate development of bacteriological weapons is acutely felt today in all the world. Is it possible in principle for a path to exist by which Russia, the USA and other countries can reach agreement and trust in bacteriological research? It would be extremely rash for a journalist to offer such a recipe. Let the specialists solve the problem; still, however, two simple questions give me no rest.

Considering that infectious diseases spread so unpredictably and depend on so many factors, and that there are so many different kinds of viruses, isn't all of this talk about the defensive nature of bacteriological programs nothing more than a cunning maneuver having the purpose of misleading society? And in principle, don't all bacteriological programs serve the goals of aggression rather than defense?

And the second question: If all bacteriological weapon programs are open today and are exclusively peaceable, defensive in nature, which is precisely what specialists in both Russia and the USA assert, then why is such ambiguous research in the hands of the military? If the work was being carried out under the roof of civilian departments, then public control would become much more effective, the room for mutual mistrust would diminish significantly, and therapeutic vaccines would finally find their way into the civilian population.

As a going-away present, Colonel Takafuji gave me a red mug bearing the emblem of his institute. I decided to give this mug to General Yevstigneyev. It would have been quite symbolic—the first peaceful exchange between Russian and American military bacteriologists. But on returning home, I discovered that the mug had broken en route. It seems that the devil is always at work behind these bacteriological weapons after all.

New 'Super Computer' Should Reduce Nuclear Tests 30 Percent

*LD2807143693 Moscow ITAR-TASS in English
1353 GMT 28 Jul 93*

[By ITAR-TASS correspondent Anna Bakina]

[Text] Moscow July 28 TASS—Specialists of the Lebedev Institute of Precision Mechanics and Computer Science created a unique super computer, "Elbrus 3-1", capable of performing more than one billion operations per second.

Gennadiy Ryabov, director of the institute and a corresponding member of the Russian Academy of Sciences, told TASS that the new computer has wide possibilities for solving most complicated problems at a modern level.

Major orders for new computers have come in from Russia's nuclear centres Arzamas-16 and Chelyabinsk-70. Paradoxically, one of the main tasks set by the designers of "Elbrus 3-1" was to scale down nuclear tests. The new computer will make it possible to reduce the number by 30 per cent by simulating test situations and providing exact answers, as if the tests were conducted in reality. Specialists believe this will radically improve the ecological situation in areas where nuclear tests are carried out.

In a similar way, the new computer will also make up to 60 per cent of car tests unnecessary.

Cooperation With Japan in Nuclear Power Engineering

*LD2807182293 Moscow ITAR-TASS in English
1636 GMT 28 Jul 93*

[By ITAR-TASS correspondent Anna Bakina]

[Text] Moscow July 28 TASS—The safe use of nuclear power plants is a major guideline for developing Russo-Japanese scientific cooperation. Andrey Sazanov, a senior expert at the Committee on International Contacts under the Russian Ministry of Power Engineering, told ITAR-TASS on Wednesday.

He pointed out the following priority areas for cooperation in 1993-1994: safety of power reactors, energy fuel, quick-neutron reactors, using the radioisotopes and processing the nuclear wastes.

All of them are included in a programme for the development of scientific and technological cooperation which was signed in April by the representatives of the Russian Ministry of Nuclear Power Industry and the Japanese Nuclear Industrial Forum.

The latter brings together 800 Japanese power companies, concerns, corporations and administrative bodies. The Russian ministry participates in the annual conferences of the forum.

According to Sazanov, the Novovoronezhsk training centre will be outfitted with 16 million dollars' worth of Japanese equipment.

A number of Russian experts will go to Japan for a probation at a cost of 20,000 dollars per visit to the Japanese party.

Russian and Japanese experts are also looking into the possibility of joint construction of nuclear power plants in the Russian Far East.

Problems With Storage of Chemical Weapons in Udmurtia

*LD2907185193 Moscow Mayak Radio Network
in Russian 1700 GMT 29 Jul 93*

[Text] Russia has a stockpile of approximately 40,000 tonnes of chemical weapons waiting to be destroyed. In Udmurtia, 11,000 tonnes of these are being stored.

A news conference was held in Izhevsk today on the problems connected with this. No funds have yet been allocated. The expiration date for storage of the deadly reserve is drawing closer, and no technology has yet been found for treating or destroying Russia's only arsenal of lewisite.

In the view of participants at the news conference, Udmurtia will be unable to deal with these problems by itself.

Supreme Soviet Decree on MTCR Related Treaties

*PM3007144793 Moscow ROSSIYSKAYA GAZETA
in Russian 31 Jul 93 First Edition p 10*

[Decree No. 5482-1 of the Russian Federation Supreme Soviet on the Ratification of International Treaties and Agreements Concerning the Missile Technology Control Regime, signed by R.I. Khasbulatov, chairman of the Russian Federation Supreme Soviet, and dated Moscow, Russian House of Soviets, 21 July 1993]

[Text] Attaching great importance to questions of preventing the proliferation of weapons of mass destruction, including the missile technology control regime [MTCR], and supporting actions aimed at achieving accord in the international community on these questions, the Russian Federation Supreme Soviet decrees:

1. International treaties and agreements in the sphere of the MTCR, to which the Russian Federation is party, are liable to ratification by the Russian Federation Supreme Soviet.

2. The Russian Federation Supreme Soviet of the Republic Commission for Transport, Communications, Information Technology, and Space; the Russian Federation Supreme Soviet Committee for International Affairs and Foreign Economic Relations; and the deputies' group for effective monitoring of military-technical

cooperation with foreign countries are to conduct parliamentary hearings into the question of conditions for the Russian Federation's accession to the MTCR.

[Signed] Russian Federation Supreme Soviet Chairman R.I. Khasbulatov,

[Dated] Moscow, Russian House of Soviets, 21 July 1993

No. 5482-1

Official Documents on Mirzayanov CW Secrets Case

*93P50252A Moscow MOSCOW NEWS in English
No 28, 9 Jul 93 p 3*

[“Document”: “The Russian Law-Enforcement Establishments Believe That Vil Mirzayanov, a Former Staffer of the State Russian Research Institute of Special Chemical Technologies, Has Inflicted Damage on Russian Interests”]

[Text] In the course of the current probe into the case of V. Mirzayanov, the Ministry of State Security of Russia sent to some of the leading establishments of the country, including the General Staff of the Russian Federation, the Ministry of Foreign Affairs of Russia and the Russian Committee on the Chemical and Oil Industries inquiries as to possible negative consequences and implications of his actions. These inquiries were answered. V. Mirzayanov submitted to the MN some statements which came to his knowledge.

The inquiries to the said outfits represented standard documents.

Secret The Investigation Department of the Ministry of State Security of the Russian Federation is looking to a criminal case in which former staffer of the State Russian Research Institute of Special Chemical Technologies is charged with perpetration of a crime falling under part 1 of Article 75 of the Criminal Code of the RSFSR. In the course of the investigation it has been established that Mirzayanov, in 1992, divulged to the mass media (MN) information constituting a state secret about the formulation, at the SRRISCT, on orders from the Defence Ministry, of a new toxic chemical and the development on its basis of a binary system. On the strength of the above I hereby request to inform me whether the General Staff of the Russian Federation is in possession of information about any negative consequences for the defence capability of Russia as a result of the said actions by Mirzayanov.

[signed] Directorate Chief Major General S.D. Balashov.

From the Reply by Colonel-General M. Kolesnikov:
Secret In his publications and interview V. Mirzayanov has revealed information about some results and findings of investigations in the field of chemical weapons which at present are not banned by any of the current international agreements. Mirzayanov published information, earlier than the established time-limits, about facilities for the development of chemical weapons and revealed the nature of their effects; he also revealed that information in detail and particulars not stipulated in the convention. The published information evoked a negative reaction in the USA, in the course of the bilateral negotiations for the prohibition of chemical weapons, now under way in Geneva. Information contained in the publication has inflicted a substantial political damage on Russia and has detracted from its authority in the international arena. A false impression has been created about Russia's alleged non-compliance with the existing commitments in the field of prohibition of chemical weapons. Thus, V. Mirzayanov's publications have now inflicted a military damage through a unilateral disclosure of information about the results of our investigations and development projects in the field of chemical weapons.

From the Reply by Deputy Minister of Foreign Affairs of the Russian Federation G. Berdennikov: *Secret The Ministry of Foreign Affairs of the Russian Federation is not in possession of information as to what extent information published by Mirzayanov corresponds to the actual state of affairs and to what has the damage been done to the interests of our security on account of divulgement of information about the development of binary chemical weapons. It can be stated nevertheless that the campaign mounted in the Russian and foreign mass media over the case of Mirzayanov has furnished the grounds for expressing by the USA of corresponding fears, addressed to us, and for US requests for provision of information with a view to clarifying the situation. Yet, so far there have not been any serious complications in our relations with the USA and other countries. During the Russian-American summit in Vancouver progress made at the bilateral negotiations between Russia and the USA on banning chemical weapons was duly emphasized.*

From the Reply by Deputy Chairman of the Roskomkhimnestepprom (the Russian Committee for the Chemical and Oil Industries) V. Semenov: *Secret According to the assessments made by the Committee's specialists, the publication by Mirzayanov, along with the divulging of top secret information, have inflicted moral and economic damage upon the chemical and petrochemical industries. This is seen in the fact that a segment of the world public and Russian public now call into question the fact of cessation of production of chemical weapons in Russia. What with the misinformation of the population of the country's regions where the facilities that formerly produced chemical weapons are now located, an atmosphere of tension and stress is now being created which leads specifically, to a repudiation of the proposal that a*

facility for destruction of chemical weapons be set up on the basis of the Cheboksary production association "Khimprom."

ESTONIA

Government Guarantees Not To Produce Chemical Weapons

WS2307140793 Tallinn ETA NEWS BULLETIN in English 0658 GMT 23 Jul 93

[Text] Friday, July 23—The Estonian government gave a guarantee on Estonia's refusal to produce chemical weapons on Tuesday [20 July]. The guarantee concerned the use of trietanolamyd, a component used for the production of cement. The small amounts concerned prevent any possibility of its use for any other purposes, Department Head of the Environment Ministry Aadu Kana announced.

KAZAKHSTAN

India Offered Space Facilities, Fuel for Nuclear Power

LD2407081193 Moscow Radio Rossii Network in Russian 0700 GMT 24 Jul 93

[Text] Kazakhstan has invited India to participate in an international space company which the Kazakh leadership is planning to set up on the basis of the Baykonur cosmodrome. Kazakhstan has also expressed readiness to supply uranium fuel for Indian nuclear power stations. RIA reports that this was stated in Delhi at a meeting of the Indian-Kazakh commission on trade and economic cooperation. During the talks the sides noted that cooperation in the sphere of space and nuclear power engineering are priority areas in their joint work. The leader of the Kazakhstan delegation said that India could launch its civilian satellites from the Baykonur cosmodrome using carrier rockets of other countries including Proton and Zenit rockets.

UKRAINE

Gamma-Radiation Unit Stolen From Enterprise

AU2807143193 Kiev HOLOS UKRAYINY in Ukrainian 24 Jul 93 p 4

[Unattributed report: "Who Needs Irradiation?"]

[Text] A gamma-radiation unit containing cesium-137 disappeared, under unknown circumstances, from the phosphoric acid shop of the Sumy production association "Khimprom" [Chemical Industry]. A search has been announced and a reward promised to those who will help find the thieves and locate the dangerous object.

END OF

FICHE

DATE FILMED

16 SEPT 1993